MEMORY CARD IMMPLEMENTATION IN LEGO ROCK RAIDERS

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The following outlines changes that will need to be made in order to implement memory card functionality to LEGO Rock Raiders. Memory card functionality has been requested by SCEA in their TRC report dated 28/02/00.

- Additions will have to be made to the front-end, order of saving, loading, selection, change of graphics screen and pad options.

- There will need to be another menu screen for loading a game.

- There will also be a screen needed for saving a game.

- Extra pad code will have to be written, as the memory card functions have to initialise after certain pad functions that we currently do not use.

- Icon graphics will need to be created. From what I can tell these are usually entered in an ASCII format so we'd have to look at how to create those. Allocate memory, VRAM etc.

- The save routines have to handle the removal and insertion of cards.

- The memory card also needs to be able to be formatted correctly and conform to SONY standards. I.e. you can't just have it on a button (For example, X to Format) - it has to be a selectable option.

- We obviously have to handle all error messages correctly, including what happens if there's not enough room on a memory card.

- If there's not enough room you have to be able to delete files off the memory card, select options, confirmation and error prompts.

- We'd have to check the saved / loaded data for possible errors and report those back.

- We'd have to conform to all 8 pages of SONY TRC's for memory card usage.

- We don't currently have the space in VRAM and Memory to put in the code, just including the additional memory card libraries, pushed us over the memory limit, without all the extra code that will be required. I'm guessing that to get the required VRAM and Memory could take a lot of re-engineering.

- I would estimate that it would take 6 weeks of additional work, because of all the changes to try and fit it in now. From previous experience everyone has had problems testing the memory cards, I would put another month on top to give a realistic time frame, from problems with memory card and with changes to the existing code, to enable it to be included.

- The other Alternative is to cut down the password. Every single bit is used at the moment, so it can not be optimised. The only way is to lose data. The only minor change to the data is on the Rock Raider characters 'in the rest room' for up to three turns. This saves one and a half characters! (This doesn't really help us much!) The other data would require a more significant change to the game play, the medal system or choice of levels to play, becoming linear. This would drastically affect game-play, game-design and the overall choices that the player currently has!

Associated Cost of memory card implementation

- Development team, 2 months = $74,000
- QA / Producer Team   = $20,000
- Re-design / layout manual   = $7000